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An Analysis of Czecho-Slovakia Using
Competitive Advantage, Core Competence
Concepts: Implications for U.S. Business

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**AN ANALYSIS OF CZECHO-SLOVAKIA USING COMPETITIVE ADVANTAGE,
CORE COMPETENCE CONCEPTS: IMPLICATIONS FOR U.S. BUSINESS**

ABSTRACT

We analyze the Czecho-Slovakian business environment and opportunities using the concepts of National Competitive Advantage and Core Competence. These are two fundamental and new concepts in the literature on competitive strategy. Our analysis provides not only ideas for consideration by policy makers and managers in Czecho-Slovakia but also highlight opportunities for U.S. businesses in the CFSR.

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We analyze the Czechoslovakian business environment and opportunities using the concepts of National Competitive Advantage and Core Competence. These are two fundamental and new concepts in the literature on competitive strategy. Our analysis provides not only ideas for consideration by policy makers and managers in Czechoslovakia but also highlights opportunities for U.S. businesses in the CFSR.

I. INTRODUCTION

Considerable current attention has been placed on business in Europe for two primary reasons. First emerged the concept of Europe 1992, and a borderless and united European market resulting in a potential market of 320 million people living in so-called developed countries. This notion has sparked much debate on the advantages and disadvantages of such an arrangement between European Economic Council nations, and the implications for the rest of the world, Japan and the United States in particular. Secondly however, more recent drastic political and economic reforms occurring in East Bloc countries have not only added the concerns of Eastern Europe to the consideration of Europe 1992.

The opening up of the economies of East Germany, Hungary, Poland, Bulgaria, Rumania and Czechoslovakia, and their move (in varying degrees) towards a more market-oriented system has provided a new area of discussion and concern. Developments such as the dismantling of the Berlin Wall, the collapse of communist regimes, the liberalization of laws restricting foreign investment have all facilitated responses from U.S. companies, such as GM manufacturing cars in East Germany and GE

making lightbulbs in Hungary.

However, significant uncertainty and volatility in the transition from a command economy to a capitalist version confront these nations, primarily inexperienced in the nuances and complexities of a free-market world. The dynamic situation of Eastern Europe can provide both an opportunity and a challenge to the West, especially to the United States and American business.

This paper examines this metamorphosis of East Bloc countries and focuses specifically on its effects on one nation, Czecho-Slovakia, and the implications for U.S. business. The paper is organized into six sections. This introduction is followed by the second part which provides an overview of the economic and political background of Czecho-Slovakia, and the current situation it is now in. The third section provides an evaluation of Czecho-Slovakia utilizing the concepts of National Competitive Advantage and Core Competence. Section Four offers a strategic framework for Czecho-Slovakia, outlining the role of government and national policy, industry and foreign investment. Given this suggested direction, Section Five discusses the implications for U.S. Business in terms of areas of opportunity, entry strategy, and marketing management considerations. The last section provides a summary and conclusion.

II. BACKGROUND

Prior to first gaining independence, Czecho-Slovakia, or what is currently known as the Czecho-Slovak Federal Republic [CSFR], had been part of the Hapsburg empire, and consisted of the territories of

Bohemia, Moravia, part of Silesia and Slovakia. At this time, glass and china production, the textile, construction materials, paper and timber industries began to develop. Czecho-Slovakia and especially Bohemia were a very advanced area of Europe with considerable industry and trade. For example, Skoda Works was the CSFR's world-class engineering company that competed on level terms with the leading German and American firms of that time. Companies such as Siemens, GE and Krupp were then its equals. As early as 1873, the CSFR had established contact with Japan as Japanese were sent to Czecho-Slovakia to study the technology for manufacturing pencils!

After the fall of the Austro-Hungarian monarchy in 1918, the CSFR emerged as a separate state with Tomas G. Masaryk as its first president. By 1938, before the Nazi invasion, Czecho-Slovakia developed into the most vigorous and dynamic industrial nation in Central Europe. The Czech and Slovak peoples became known for their rich traditions of literature, industry, engineering, art and democracy. Then came the periods of Nazism, militarism and World War II, followed by forty two years of socialism which included a Soviet occupation. Such a repressive environment included a centrally planned communist economy proved detrimental to maintaining a continued industrial growth as had been experienced in the past.

In November 1989, the CSFR underwent what is now called the "Velvet Revolution" (Financial World 1990a) which has been one of the more peaceful transitions of government in Eastern Europe. Unlike the more violent and radical events in Rumania for example, a student insurrection followed by a general strike was sufficient to bring

Communist leaders to their knees and catapult dissident playwright Vaclav Havel from political prisoner to president. Similar to its East Bloc neighbors, the CSFR has expressed a commitment to developing the path to a market economy. However, the primary concern of the CSFR and other Eastern Europe nations is how to initiate and maintain the transition while preserving economic order and minimizing the inevitable dislocations.

Currently, the Havel government has legalized private enterprise, enacted laws to attract foreign investment, and begun to lead public industries on the road to privatization. The CSFR has also pioneered the effort to dismantle the East Bloc's trade vehicle, Comecon. The prognosis is optimistic for Czecho-Slovakia as experts cite that its fifteen million inhabitants have a fairly strong industrial sector, low foreign debt, and exportable products that can garner some of the hard currency vital to modernization of its industries. Unlike even the Soviet Union, there are no food lines as the country has been considerably self-sufficient. In contrast to other Eastern Europe nations, it can be argued that the CSFR has the economic foundation to make the move to a market economy in a less turbulent manner.

Table 1 further illustrates the CSFR's relative advantage in various areas when compared to the other leading Eastern European

----- Place Table 1 Here -----

nations of East Germany, Poland and Hungary. Czecho-Slovakia's situation is also compared to that of Spain. As a further point of reference to Western Europe nations, the CFSR per capita GNP can be compared to that of France or Norway during the 70s (Quarterly Economic

Review, 1976; 1978). With a 1988 GNP of \$118.6 billion and a population of 15.6 million, Czecho-Slovakia ranks second only to East Germany in per capita GNP. Hourly wages in the CSFR rank second again to East Germany, while the education level is surpassed only by that of Hungary. Evident of the CSFR's skilled work force, about thirty percent have a secondary or higher education. Moreover, Czecho-Slovakia's level of industrialization closely approaches that of East Germany with factory output of sixty percent of GNP (about \$71.2 billion) surpassing that of both Poland and Hungary. In addition, the CSFR distinctly has the least amount of foreign debt among the four countries, with only about \$6 billion outstanding compared to Poland's close to \$40 billion. Table 1 also indicates a common need among these countries in hard currency assets.

As further evidence of an infrastructure that is in better condition than its other East Bloc neighbors, Table 2 provides a list of the CSFR's leading companies, their industries and their capabilities.

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III. COMPETITIVE EVALUATION

Given the current economic and industrial situation Czecho-Slovakia is in, a closer look into the CSFR's competitive position can provide a much clearer picture of the country's potential. In doing this, the concepts of National Competitive Advantage (Porter 1990) and Core Competence (Prahalad and Hamel 1990), are utilized and adapted to the Czecho-Slovakian case.

It can be argued that a National Competitive Advantage and Core

Competence perspective applied to Czecho-Slovakia has its relevance and appropriateness. If traditional economic thinking (such as comparative advantage theory found in the classical economics of Smith and Ricardo) is applied, the CSFR can never be a serious player in the world economy. Through a more dynamic National Advantage approach, Czecho-Slovakia has the potential to become not only an economic powerhouse in Eastern Europe, but also in the global market. Moreover, the Core Competence emphasis on the importance of a firm's fundamental or "core" strengths provides a very direct relevance to the CSFR and its companies.

However, the following assumptions, limitations and caveats should be stated. This paper assumes that political reform in the CSFR has achieved a substantial degree of stability and certainty to facilitate the economic transition. The limitations of the notion of National Competitive Advantage and Core Competence are acknowledged, as they have been recently cited (Economist, 1990a). It is recognized that these terms were conceptualized with developed long-standing market economies in mind. Porter's study for example, involved ten developed or newly developed market-oriented nations. However, with an awareness of such an orientation and with sufficient and proper adaptation, these concepts can be applied to Czecho-Slovakia's case. Furthermore, in as much as a framework for a strategic alternative can be proposed for Czecho-Slovakia, it is accepted that there is no guarantee that such a direction will be taken by the CSFR government and industry.

In modifying and applying the National Competitive Advantage approach to the post-centrally planned economy case of Czecho-Slovakia, there are two basic distinctions that need to be made relative to the

original free-market/developed country economy situation:

1. It should be recognized that unlike the CSFR situation, much of the elements found in the original cases (countries studied by Porter and his colleagues) already do exist, and have just been overlooked or not further developed through innovation and upgrading. Much of this in Czecho-Slovakia doesn't exist and needs to be created and maintained. Only then can the potential for further innovation be realized. In contrast to westernized developed countries, Czecho-Slovakia is in the infancy stage of the development of National Competitive Advantage.
2. Given this absence of important factors, and the need to create them, it will take considerably more time and effort relative to the original free-market situation. Therefore, it should be accepted that the development of national competitive advantage for Czecho-Slovakia will not happen overnight. One advantage for the CSFR case is that the mistakes and pitfalls encountered by developed free-market countries can be avoided by Czecho-Slovakia in developing its own National Competitive Advantage.

Porter's concept of National Competitive Advantage proposes that there are four attributes essential to the "Diamond of National Competitive Advantage" that determine success in the global market. These attributes are 1) Factor Conditions, 2) Demand Conditions, 3) Related & Supporting Industries and 4) Firm Strategy, Structure and Rivalry. In all these attributes, considerable development is obviously needed for the CSFR. However, substantial potential exists in a variety of areas.

Factor Conditions

Factor conditions concern the CSFR's factors of production. Given its education and industry levels it is often argued that Czecho-Slovakia is like a "diamond in the rough" with a relatively significant amount of skilled labor and infrastructure (see Table 1). In fact,

current literature has cited Eastern Europe's skilled low-cost labor as a general advantage of the region (Business Week 1989). However, having such factors does not amount to a competitive advantage in international competition. Porter's approach would contend that the rate and efficiency with which the CSFR can create, improve and allocate its factors into a specialized effort targeting the needs of specific industries are more crucial to creating a competitive advantage. As later discussed in the paper, the CSFR has the potential in a number of industries. To develop further these areas as a competitive advantage, the CSFR needs heavy and sustained investment.

Demand Conditions

Demand Conditions involve the characteristics of the CSFR's home market demand for Czecho-Slovakian products and services. Domestic demand is important to the creation of competitive advantage as it provides a potentially defensible conduit to emerging consumer needs and facilitates further and faster innovation. Moreover, another popular statement in current literature is that Eastern Europe basically has a huge amount of "pent-up" demand suppressed in a large pool of potential consumers waiting for the influx of western products. However, in a developed country environment, this determinant assumes that domestic buyers are considerably well-informed, sophisticated and discriminating. In the case of the CSFR, such conditions do not exist. Therefore, demand conditions can be only used to develop competitive advantage if the demand condition itself is developed.

Related & Supporting Industries

The third determinant involves the existence of related and

supporting industries in the CSFR that are internationally competitive. Conceptually, this provides efficient access to components and machinery as well as the close working relationship conducive to further innovation and upgrading. Arguably, the difficulty with the CSFR lies

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Related & Supporting Industries

The third determinant involves the existence of related and

supporting industries in the CSFR that are internationally competitive. Conceptually, this provides efficient access to components and machinery as well as the close working relationship conducive to further innovation and upgrading. Arguably, the difficulty with the CSFR lies in the "internationally competitive" prerequisite. Although a number of CSFR supplier industries are regionally competitive and even dominant, none can be seriously considered as globally competitive. However, the CSFR can alternatively source abroad from global competitors in the areas of generalized technologies where a narrow application area is concerned, minimizing any detrimental effect on domestic industry.

Firm Strategy, Structure and Rivalry

Along with Demand Conditions, the area of firm strategy, structure and rivalry is the most critical for the CSFR. The detrimental impact of 42 years of central planning is quite evident in Czecho-Slovakia's inept management system, the absence of viable company goals, and insufficient individual motivation. Such characteristics have translated into a lack of firm strategy, an inefficient and bureaucratic firm structure, and suppressed domestic firm rivalry. Domestic firm rivalry has been identified as the most important of the four determinants of National Competitive Advantage. Such rivalry provides a powerful incentive for firms to innovate and upgrade. Unfortunately, it is arguably the area wherein the CSFR is most deficient. Not only are CSFR companies heavily subsidized and protected by the government as in some cases in the west, in contrast, they are actually state-owned. Privately held companies have been illegal in Czecho-Slovakia up until February 1990. Under these conditions it is no wonder that domestic

rivalry was essentially non-existent.

Given the above state of Czecho-Slovakia viewed under a National Competitive Advantage lens, there are three industries that provide the CSFR with the greatest potential in terms of the four determinants previously discussed. They are the **MECHANICAL/ELECTRICAL ENGINEERING, AGRICULTURE/FOOD, AND CHEMICAL INDUSTRIES.**

In these particular industries, the CSFR maintains a considerable foundation or starting point for development into a national competitive advantage. Among other centrally planned economies, Czecho-Slovakia already maintains a regional competitive advantage in these areas. The determinants of Factor Conditions and Related and Supporting Industries exhibit the most potential in these areas.

Mechanical & Electrical Engineering Industry

Traditional CSFR engineering products include vehicles such as aircraft, automobiles, motorcycles, scooters, trucks, tractors, large excavators, locomotives, haulers, and river barges. CSFR also manufactures other industrial equipment such as heavy and light machinery, agricultural and chemical machinery, construction and cement plant equipment, pumps, engines, and energy installations. Recent focus has been in the areas of microelectronics and robotics.

Agriculture & Food Industry-

CSFR has been uniquely self-sufficient in the area of agriculture enabling its citizens to avoid the lines for agricultural produce characteristic of other centrally planned economies. Supplies to CSFR consumers have continued without major disruption while the food industry has been one of the more successful sectors of manufacturing.

Much of the success of this industry has been attributed to the much publicized Slusovice cooperative, to the extent that even the USSR is looking into transplanting the system to the Soviet's lackluster farm sector. The cooperative was largely exempted from the central planning system and allowed to keep most of its revenues. Consequently, the cooperative has diversified into other areas including biotechnology, top-quality farm equipment manufacturing, and even computer assembly. Moreover, with increasing dual career families (as in the West) and increasing incentives to work, a more elaborate food processing industry may need to emerge. Such a need could lead to opportunities in the international market for Czecho-Slovakian food and agriculture products.

Chemical Industry

Czecho-Slovakian chemist Otto Wichterle and his development of polymers for the first soft contact lenses in the early 1960s (Financial World 1990) indicates much potential for the \$11 billion chemical industry. The chemical industry is one of the most promising sectors of the CSFR economy. Amidst a sluggish GDP growth of 2% for 1989, this sector accounted for 13.5 percent of overall production and 6 percent of exported industrial goods (Chemical Week 1989a). Further evidence of the chemical industry's increasing strength is the shift of Petrimex, the major trade organization from an import to an export-oriented agency. In addition, various laws and government measures have been taken to reduce middle management bureaucracy, increase individual company accountability and liberalize foreign investment.

Figure 1 is indicative of the steady growth in the CSFR's production in industrial and agricultural sectors.

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An example of an industry cluster involving aircraft manufacturing is illustrated in Figure 2. The CSFR aircraft industry has specialized

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in particular small-airplane segments such as trainers, commuter planes, sports, and utility (transport, crop dusting, fire fighting, etc). Such a direction of specialization augments the development of national competitive advantage. However, a boost of further innovation and upgrading is needed. The lack of domestic competition or rivalry among manufacturers and their suppliers should also be dealt with.

To illustrate this further, the CFSR aircraft industry can be compared with the rest of Europe's industry, in particular, the Italian aircraft equipment industry. Similar to the CFSR's, Italy's equipment industry is relatively modest in size. Although comprised of about fifty Italian companies, all but six of these firms are relatively small-scale operations. However, evident of its international competitiveness, the Italian aircraft equipment sector is in direct competition with its much larger French and British counterparts. One significant contributor to such competitive advantage is the considerable degree of domestic rivalry indicated by Figure 3.

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In the sector of electronics, there are quite a few more domestic companies in Italy, than those found in Czecho-Slovakia. Even in the electronic equipment sub-sectors of radars and instruments, domestic rivalry can be found. Another example, there are also considerably more Italian companies than CFSR firms that deal with aircraft hydraulics.

These Italian companies also form consortiums (such as CIRSEA and CITES) to facilitate cooperation in areas such as research and development, but internal competition is not hindered. Large Italian companies such as Aeritalia, Agusta and Selenia also foster domestic rivalry through vertical integration with their subsidiaries in the various industry sectors.

CSFR Firm Core Competence

The emergence of Czechoslovakia's national competitive advantage depends by in large on the development of individual CSFR firms. This company development in turn relies on the firm's core competencies and their creation. According to Prahalad and Hamel, core competencies are derived from the "collective learning" of the company involving the integration of diversified technologies and production skills. Applying such a concept to the Czecho-Slovakian environment accustomed to the bureaucracies and inefficiencies of central planning, a re-emphasis on "communication, involvement, and a deep commitment to working across organizational boundaries" would seem like an insurmountable effort. However, having to build from scratch does provide the CSFR with the opportunity to avoid the problem of Western firms in overlooking the significance of their core competencies.

Having an essentially industrialized economy relative to the rest of Eastern Europe, provides the CSFR with a significant catalyst to spark the creation, maintenance and growth of core competencies. Skoda for example, achieved combined (including the automobile operation) sales of about \$1.25 billion last year, making it the largest industrial firm in Eastern Europe (Forbes 1990b). A potential Skoda core

competence may be found in engine building. However, substantial steps need to be taken in the emergence of such a competence. In addition to the importance of innovation and modernization vital to the building of competencies, the inefficient practices of central planning need to be eliminated. The overly self-sufficient Skoda does everything unnecessarily, from smelting steel to generating its own electrical needs. This promotes not only production and resource allocation inefficiency, but discourages supplier competition. Skoda's case also illustrates the need not solely for vertical integration, but for strategic vertical integration, i.e. the right level of vertical integration.

In addition, the existing external supplier situation also needs to be developed to facilitate the emergence of more supplier firms and hence domestic supplier rivalry. A considerable amount of Skoda's components come from other state-owned enterprises, many of which face an uncertain future. For example, BAZ, a Bratislava truck manufacturer, is the only supplier of axles for Skoda. With the uncertainty that BAZ faces, should BAZ go under, Skoda's supply of axles could suddenly be cut off.

Vision, Innovation and Commitment

Both National Competitive Advantage and Core Competence highlight three main concerns when applied to Czecho-Slovakia. In the creation and development of advantages and competence, the CSFR needs to focus on:

1. VISION- all involved, government and firms, need to formulate a sense of direction in the form of compatible national and company goals

and the strategies to achieve them.

2. INNOVATION- a vital element to the success of these strategies is the process of continuous upgrading and enhancement of CSFR business. Investment (capital as well as educational) keeps this process alive. In turn, such investment, foreign included, should be in line with the previously mentioned strategies.

3. COMMITMENT- direction and innovation are ineffective without a long term commitment, spanning at least a decade. The high short-term expectations of government, business and the general public may prevent the preservation of such a commitment.

Figure 4 shows the interdependence of the three previously identified industries conducive to the development and maintenance of core competencies and national competitive advantage. An example of

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cross-industry relationships involves companies such as Moravan, Chemopetrol, Slovnaft and Slusovice. Chemical companies like Chemopetrol provide inputs such as polystyrene, pigments, dyes that help Moravan manufacture the Z-37 Omelak Crop Sprayer airplane used in spraying beet fields with sugar beet herbicide made by Slovnaft. This helps Slusovice agricultural production which in turn provides CSFR consumers with 5,594 tons of sugar beets in 1988. Also, the seeds of inter-industry rivalry can be seen in the competition the agricultural sector is providing the others by diversifying into agricultural equipment and biotechnology.

IV. STRATEGIC FRAMEWORK

In Czecho-Slovakia's quest to become a viable global competitor given its potential, the CSFR government needs to play a significant role. This may sound strange given our earlier diatribe against centrally planned economies. However, in the transition from central planning to a free-market orientation, the government first has to relinquish its hand in business and industry through systematic privatization and the maintenance of a "hands-off" policy. Government-owned monopolies need to be carefully dismantled, insuring that their places are taken by viable competitive enterprises with vision. Significant steps to this effect have already been taken by recent CSFR action. At the same time however, it is crucial that the CSFR government: 1) identify potential national competitive advantages; 2) create an overall strategy towards developing and maintaining these competitive advantages, and achieving economic growth and prosperity; 3) design and implement national policies to carry out such a strategy. A Good example to follow might be how Japan's Ministry of International Trade and Industry (MITI) operates and how a network of powerful government officials and company executives insures rowing to a competitive rhythm; 4) develop a strong relationship between national and federal government with a concerted effort towards development.

Specifically, in its bid towards increased privatization, the Havel administration's most significant task is to revamp the structure of its companies, utilizing a combination of the following possible alternatives given in Table 3. In this context it is critical in the

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dismantling to maintain the right level of vertical integration in each

industry. This right level should provide for any invigorative environment for innovation- reducing the bureaucratic chains of command that predictably consume valuable time. And, it should allow for sufficient size for synergistic management.

The government price bureau which sets artificial prices should be eliminated as prices should reflect the real value that goes into products. The CSFR political leadership should also play the role of catalyst for increased domestic entrepreneurship and rivalry among Czecho-Slovakian firms. In doing so, the development of specialized factors of production in the three key industries cited should be promoted.

Although the CSFR has also taken steps to encourage foreign investment by establishing clearer and more attractive joint venture laws insuring repatriation of investments and transfer of profits under bilateral agreements (Industry Week 1990), the direction and strategy that Czecho-Slovakia has envisioned and taken need to also be imbedded into such foreign investment policy. Incentives should be designed to attract investment in the targeted industries. This investment should be able to upgrade both specialized production factors and local management.

In addition to microeconomic reforms, macro-economic policies are also needed to stabilize the economy. Substantial income taxes and probably consumption taxes may be needed to help minimize increasing budget deficits, and finance support for labor unemployed in the transition to a market economy. Monetary policy should also be designed to control the inflationary effect of a substantial supply of money

pursuing a limited amount of goods.

Significant to not only Czecho-Slovakia but the entire region itself is the problem of pollution and deteriorating environmental conditions. This concern and the industrial advantages Czecho-Slovakia has, should provide the potential for the CSFR to pioneer in this respect by employing effective safety and environmental standards. The CSFR also can avail of profitable opportunities in pollution control and environmental clean-up industries by focusing its capable chemical and instrumentation industry effort in this direction.

In the area of demand conditions, both government and domestic firms play an important role in consumer education. The Czecho-Slovakian consumer needs to become more knowledgeable and sophisticated in terms of product alternatives. This can be done through the creation of consumer groups, organizations, media and other promotional efforts much in the same way as found in the west. Information is the key to consumers providing an engine for innovation and competition. Developing private organizations, like a consumer union providing information such as consumer reports would be a step in the right direction. Perhaps such organizations need to be initially supported by the government until they achieve credibility with the consumers. Alternatively, these might be supported by western consumer groups, in exchange for consumer research.

Ultimately, the Czecho-Slovakian manager has the essential role in developing a competitive advantage. But is this CSFR manager ready? First, domestic companies need to provide adequate training and education for their management and staff in the workings of a market

economy. This way, domestic management would be able to, for example, tackle the task of determining a pay scale difference between two employees with varying skills. Second, further training and education needs to be specialized in specific industries or industry groups, such as industrial engineering. In this context, besides providing business or specialized training to college graduates, perhaps students of polytechnics (or associate technical programs) should also be put through a business sensitizing program.

Externally, Czecho-Slovakian firms also should contribute to consumer education and development efforts especially for consumer goods companies. This should facilitate an effective awareness of current and potential consumer needs which would contribute significantly to further product innovation and improvement. Domestic companies can further promote such innovation and upgrading, and the eventual development competitive advantage, by welcoming and taking advantage of domestic rivalries.

With its relatively small foreign debt, one alternative would be for the CSFR government and domestic firms to borrow more to finance their efforts. However, adequate entrepreneurial spirit and the knowledge of proper investment strategies need to be first present among CSFR managers. There is no advantage to borrowing more funds if company management does not know how to use it most productively. This would also presuppose a well-developed legal system for business and financial matters.

This introduces the role of foreign investment. The primary role of foreign investment would be to help upgrade production equipment and

infrastructure that is mostly 20 or more years old and of which a full one-third is useless. Foreign efforts should also contribute significantly in the education process of both CSFR management and consumer, through training or education programs and through the introduction of consumer-oriented media. Foreign companies can also contribute to increased rivalries among domestic companies and their suppliers by competitive sourcing practices.

From the CSFR perspective, it is important that foreign investment create specialized employment and promote the development of the targeted industries or industry clusters, based on the arguments of National Competitive Advantage (Porter 1990). Exports in these industries need to be developed and upgraded in order to gain hard currency export revenues that can in turn facilitate further innovation and improvement.

V. IMPLICATIONS FOR U.S. BUSINESS

If the political and economic reforms continue in the CSFR, it is unquestionable that there will be significant opportunities for western and American companies in particular, in the Czecho-Slovakian market. Although the economies of the CSFR and its neighbors have lagged behind that of the U.S. and the West, the standard of living is considerably above that in less developed regions such as Latin America and Africa. Statistics show that per-capita GDP of \$5,281 (compared to Taiwan's \$5,897 and Brazil's \$2,454) in Czecho-Slovakia positions the CSFR on the edge of sophisticated consumer markets, indicating that it has tremendous potential as markets for Western products and services.

Above all however, U.S. business should be aware that according to the CSFR government, consumer goods are the lowest priority at this point. Therefore, flooding the Czecho-Slovakian market with American toothpaste or jeans would not receive an favorable consumer and government response. In addition barriers such as prices, currency convertibility, legal framework and public attitudes need to be dealt with. In general, the current move towards a more market economy comes with high risk, unexpected changes in direction and great difficulty.

The first step that U.S. investors need to take is to essentially understand the underlying strategies and goals of the CSFR government in its reform. Assuming that the CSFR has targeted key industries for development into national competitive advantages, and that leading CSFR companies have identified potential core competencies to be strengthened, U.S. companies should be able to:

- 1) Assist in the identification and assessment of such competitive advantages and competencies- there is no guarantee that Czecho-Slovakian policy makers and managers would necessarily perform this task on their own. U.S. business consultants and experts should provide the necessary tools to do this. They too need to be trained in the necessities of economies like Czecho-Slovakia. They should first live there and carry out an extensive study of the local environment before acting as experts at conversion.

- 2) Assist in the actual development of these advantages and competencies through specialized innovation and upgrading in the key industries with substantial investment.

Therefore, it is recommended that U.S. companies in the areas of

mechanical and electrical engineering, chemical engineering and agriculture/food production face the greatest opportunity in Czecho-Slovakia. There already have been measures taken in this direction. In the chemical industry for example, Chevron has licensed an alpha olefins plant in Neratovice, while Union Carbide is involved in the production of high-density polyethylene. GE has recently won a \$300 million contract to sell jet engines to the CSFR's aircraft industry.

Another major concern for U.S. companies investing in the CSFR, involves selecting the appropriate entry strategy. Of course, this would vary from case to case, yet the most prevalent strategy in the CSFR and Eastern Europe has become the JOINT VENTURE either with a large industry or with one of the small emerging enterprises. LICENSING and/or FRANCHISING has also been used and accepted as a way to upgrade particular technologies, however it lacks the capital investment found in joint ventures. Fortunately, the CSFR has improved the legal environment concerning joint ventures creating a more attractive alternative for foreign investors. More recent examples are joint ventures being developed with Siemens and Whirlpool International. Still, hastily formed joint venture agreements do have their pitfalls. U.S. companies need to be adequately knowledgeable and experienced in joint venture arrangements with the CSFR or any East Bloc country, in order to avoid the numerous difficulties encountered in ventures with Soviet and Chinese enterprises. A joint venture monitoring set-up similar to that of Arthur Anderson in the Soviet Union would be beneficial early in the game.

Since Czecho-Slovakia has relatively low foreign debt and some

amount of hard currency earned from increased exports to the West, EXPORT SALES of capital equipment is another alternative for U.S. manufacturers. In 1989, the CSFR chemical company, Duslo, purchased \$6 million in industrial control systems from Honeywell. Also due to its relatively more developed economy, minor foreign debt and established export markets, Czecho-Slovakia has not been a major player in the countertrade game. Although the use of countertrade had been expected to increase due to old physical plants and equipment, tight credit and possible Western recessions, it is more likely that the CSFR economy would opt for countertrade arrangements chiefly in response to economic downturns. Nevertheless, recent shifts towards market-type reforms could minimize the eventual need for such measures.

Once involved with the CSFR it is crucial to success that U.S. business actively participate in the training and education of both the Czecho-Slovakian manager and consumer. In addition to political and economic change, public attitude also needs to be reformed. In order for American firms to build and run effective production facilities in the CSFR, it is vital for them to train a new generation of workers and managers, and in turn be themselves trained in management in this new environment for them. Incentives and motivation needs to be instilled and rekindled. Proper production measurements need to be installed as increased productivity is critical to CSFR's economic revitalization.

Although the initial emphasis is on technical and industrial goods, eventually consumer goods obviously cannot be ignored. However, although the CSFR already has some foundation in the technical and industrial sector, considerable development is need in the consumer

area. The first task for U.S. marketers would be to establish a true marketing management culture that is focused on serving consumer needs, which would lead to the development of consumerism.

Table 4 provides some insight into the consumer potential

----- Place Table 4 Here -----

in the CSFR. Changes in existing media are also occurring as TV and radio airtime are now extended and open to foreign marketers. Both magazines and newspapers have also increased advertising availability. However, in as much as industrial infrastructure needs to be improved, the marketing system infrastructure needs to be rebuilt. For example, although magazines carry the bulk of CSFR advertising, paper shortages decreases actual per-copy circulation and increases pass-along readership. The broadcast industry also suffers from lack of investment. The media cannot depend on advertising which is controlled by the state. In product development, domestic consumer goods need substantial strides in the areas of quality and packaging.

The marketing research industry needs to be developed in the right manner. Its focus should be on providing the right consumer information- both external and internal to Czecho-Slovakia. This information is that which would be critical to concurrent engineering in the development of the best new products. Waste must be avoided and haste creates it.

VI. CONCLUSION

It is obvious that although tremendous potential opportunities abound in Czecho-Slovakia, there is much to be done by all those

involved. The CSFR government, Czecho-Slovakian firms and American companies all need to realize and work towards developing and maintaining company core competencies and national competitive advantages. The mechanical & electrical engineering, chemical and agricultural/food production industries need to achieve considerable improvement and innovation in order to transform Czecho-Slovakia into a global player.

Two elements are vital to such goals. The often cited capital and technical investment is quite obvious. The second, less obvious requirement of social education is just as important. Government and business (both domestic and foreign) need to carry out a concerted effort to reform the attitudes of Czecho-Slovakia's laborers, managers and consumers through appropriate training and education.

Finally, a long term perspective is essential to success. The CSFR government and business must realize that economic success is not achieved quickly with short run stop-gap measures. • Nor is it achieved by leapfrogging the necessary foundations. The effort towards free markets and democracy should be maintained. U.S. companies could provide the capital, equipment and knowledge to facilitate economic development. They cannot afford to take a "wait-and-see" attitude while Japanese and Western Europe counterparts gain an early foothold and hinder a later entry. Neither should U.S. firms jump in blindly without sufficient homework. They should take a long term view and send managers to take courses in Czecho-Slovakian universities like the Japanese and South Koreans do in the U.S. This would give the managers opportunities to be sensitive to the new culture

and form lasting relationships. Perhaps joint management education, with part of it in the U.S. and part of it in Czecho-Slovakia would also be appropriate.

Building on opportunities in CSFR's market requires flexibility, a long term approach and an adequate awareness of rapidly changing internal conditions. Done this way, both Czecho-Slovakian industry and U.S. businesses stand to benefit considerably.

TABLE 1

COUNTRY COMPARISONS

| | CZECHO- SLOVAKIA | EAST GERMANY | POLAND | HUNGARY | SPAIN |
|---|---------------------|-----------------|---------|---------|---------|
| PER CAPITA GNP GSP/NMP converted 1988 | \$7.5K | \$9.38K | \$5.1K | \$5.5K | \$8.75 |
| HOURLY WAGES converted at official rates 1988 | \$2.21 | \$4.00 | \$1.33 | \$1.60 | \$1.50 |
| EDUCATION % workforce w/ secondary or higher mid-1980s | 30% | 28% | 29% | 33% | 47% |
| POPULATION 1989 | 15mil | 16mil | 37mil | 10mil | 39mil |
| INDUSTRIALIZATION Factory Output as percent of GNP 1987 | 61% | 62% | 46% | 50% | 30% |
| DEBT Net Hard-Currency Foreign 1988 | \$1.5bil | \$4.0bil | \$35bil | \$11bil | \$33bil |
| HARD CURRENCY 1988 | \$5bil | \$16bil | \$4bil | \$6bil | \$39bil |

Sources: Derived from Business Week, 1989.

TABLE 2

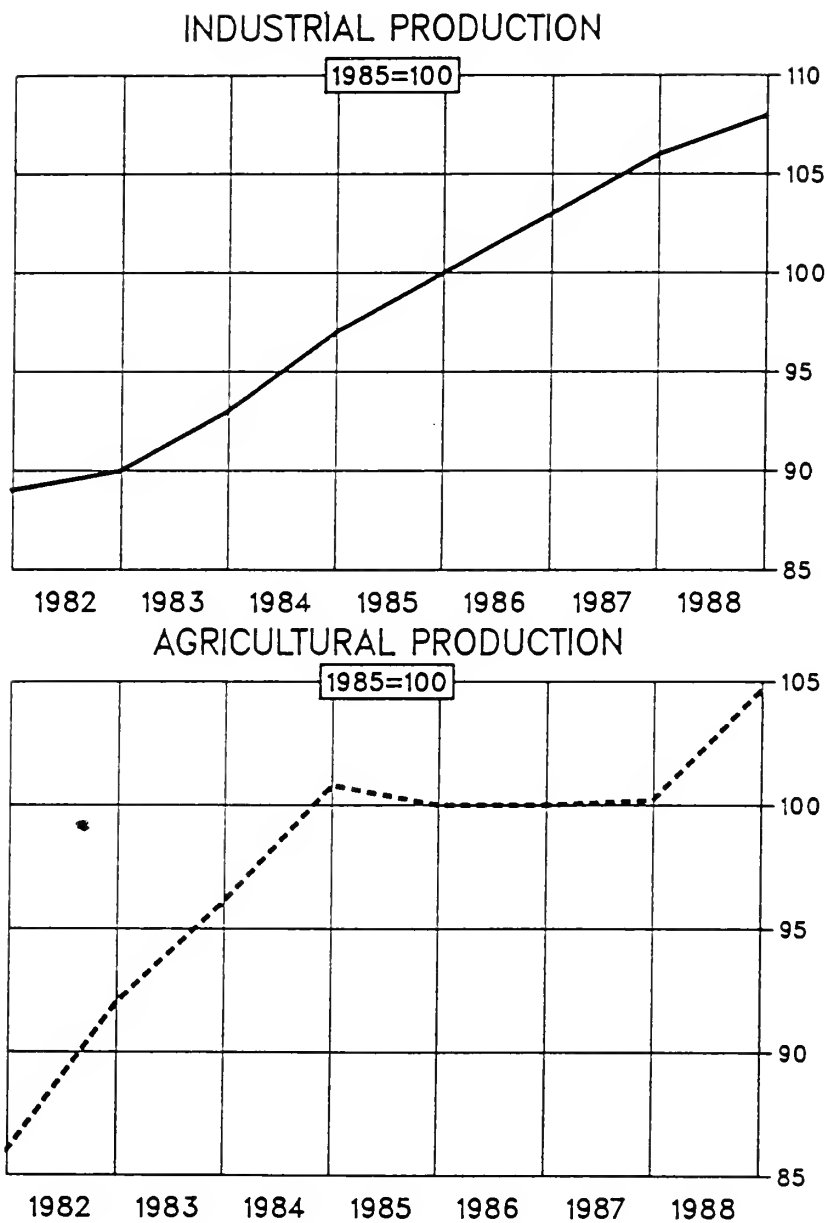
LEADING CSFR COMPANIES

| COMPANY | INDUSTRY | PRODUCTION | ASSETS |
|---------------------|--------------------|--------------|---------------|
| CEZ | electric energy | Kcs 31.7 mil | Kcs 130.7 mil |
| SKODA | heavy machinery | 28.2 | 40.3 |
| ZTS | heavy machinery | 22.8 | 30.3 |
| OKR | mining | 21.7 | 59.3 |
| NHKG | steel works, mills | 18.7 | 22.3 |
| VCHS Zeleziarne | steelworks | 18.4 | 24.6 |
| Slovnaft | chemicals | 16.9 | 14.3 |
| Vitkovice Zelezainy | ironworks | 16.2 | 21.5 |
| Cheza | chemicals | 14.7 | 21.0 |
| ZSE | heavy engineering | 13.7 | 12.8 |
| CKD | heavy machinery | 10.6 | 12.4 |
| AZNP | automobiles | 9.2 | 11.8 |
| Tatra | trucks | 8.6 | 8.1 |
| Chepos | heavy machinery | 6.7 | 6.9 |
| Sigma | pumps | 6.7 | 7.9 |

Kcs.= Koruna Ceskoslovenska (Czech Crown)
 Commercial Exchange Rate: \$1 = Kcs 16.64

Sources: Financial World 1990
 Business International Country Report 1990

FIGURE 1
CSSR PRODUCTION



Sources: Statistika Rocenka CSSR
Business International Country Report 1990

FIGURE 2

CZECHO-SLOVAKIAN AIRCRAFT INDUSTRY CLUSTER

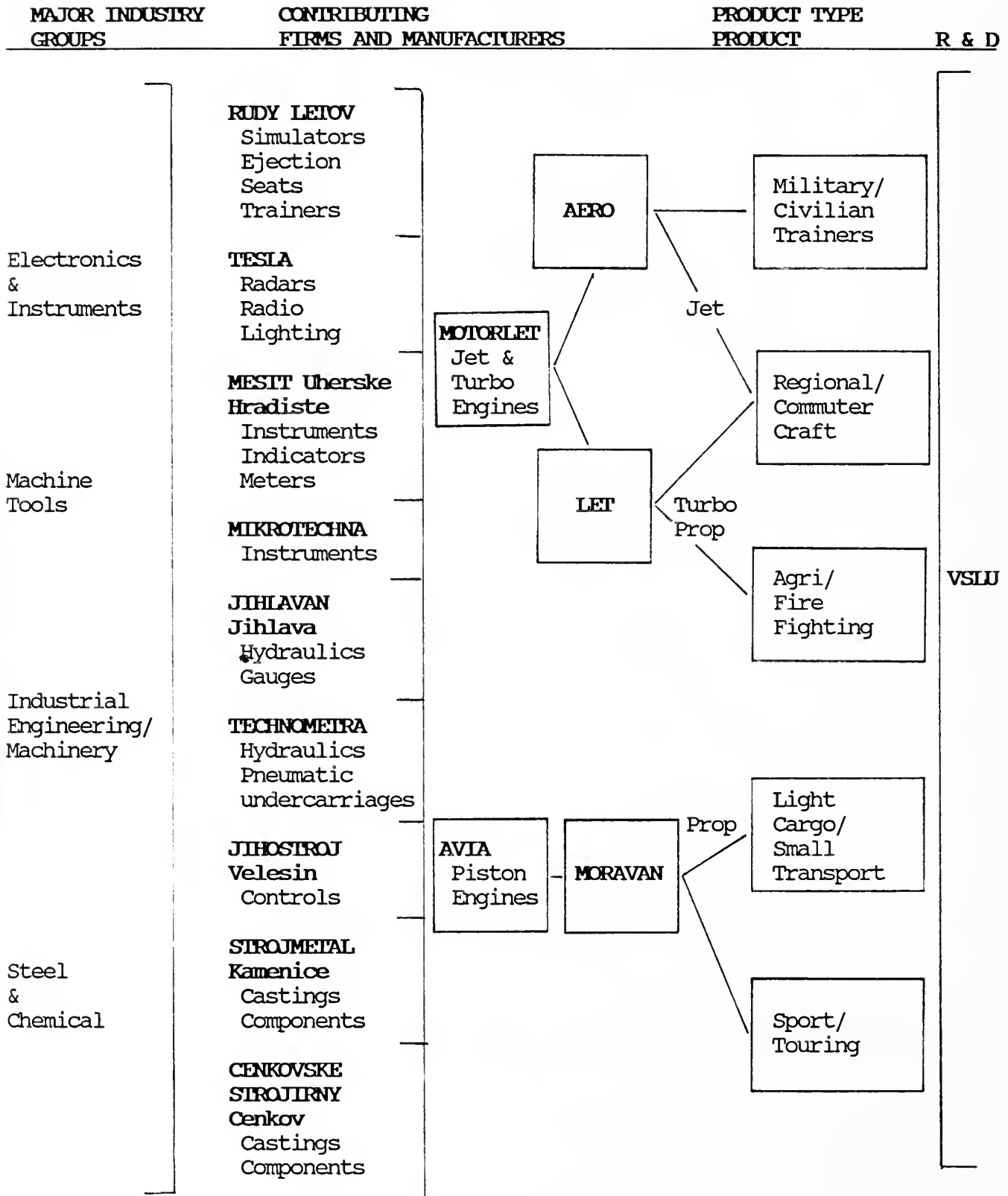


FIGURE 3

ITALIAN AIRCRAFT EQUIPMENT INDUSTRY CLUSTER

| MAJOR INDUSTRY GROUP | INDUSTRY SUBGROUP | FIRMS |
|---|--|---|
| ELECTRONICS & INSTRUMENTATION | ELECTRONIC COMPONENTS: | Agusta Brenda Meccanica Officine Galileo Elettronica Marconi Italiana OTO Melara Elmer Farem Magnettil Marelli MES |
| | -RADARS: | Fiar SMA |
| | -TEST EQUIPMENT: | Selema OMI Litton Italia |
| | HYDRAULIC/ FUEL/LANDING SYSTEMS: | Fimac Magnaghi Napoli Magnaghi Oleodinamica Nardi OMA Secondo Mona Microtecnica |
| INDUSTRIAL ENGINEERING/ MACHINERY | AIRFRAMES: | Aeritalia Agusta |

FIGURE 4

CFSR THREE-INDUSTRY INTERDEPENDENCE

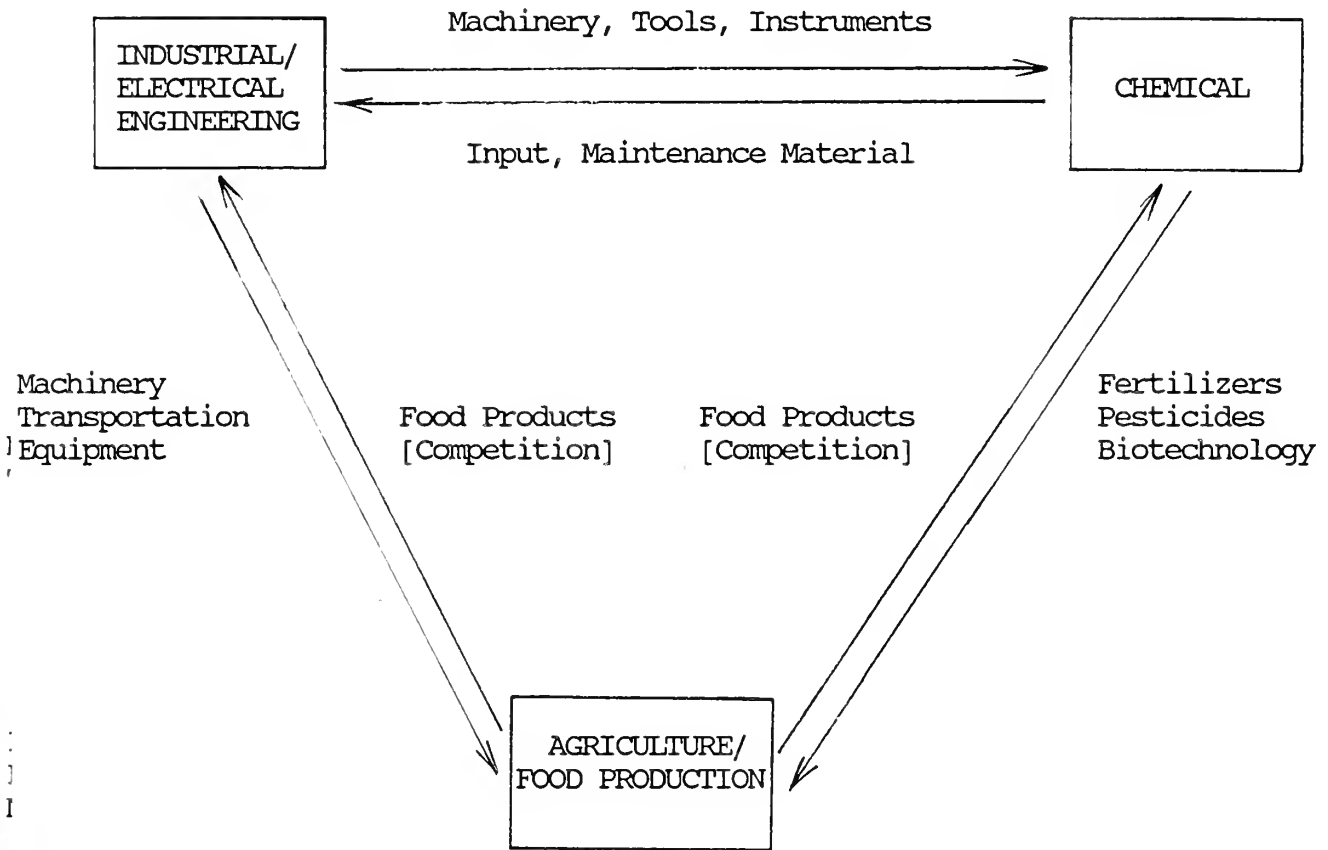


TABLE 3

ALTERNATIVE APPROACHES TO PRIVATIZATION

I. EMPLOYEE OWNERSHIP

Installation of an Employee Stock Ownership Plan (ESOP) transferring ownership of State Owned Enterprise (SOEs) from government to workers themselves.

II. PUBLIC OWNERSHIP

Creation of marketable shares of SOEs distributed to citizens as a "social dividend" or through a voucher system, transferring primary ownership from government to the public.

III. CROSS-FIRM OWNERSHIP

Conversion of SOEs into a more supplier/creditor-oriented group of smaller firms, with worker participation and cross ownership among principal interrelated companies.

IV. ENTREPRENEUR OWNERSHIP

Creation of new smaller private companies through new cooperatives, partnerships and new ventures initiated by motivated managers and employees themselves.

V. MANAGEMENT OR FOREIGN OWNERSHIP

Conversion of SOEs into current management-owned or foreign investor-owned companies through sale or joint venture.

Source: Derived from Business Week 1990.

TABLE 4

CONSUMER INDICATORS

POPULATION: 15.7 Million; more than 50% between the ages of 15-64

TELEVISION SETS: 4.4 million

AUTOMOBILES: 2.6 million

| | | |
|------------------|-----------------------------|------------|
| CONSUMER PRICES: | Skoda Hatchback, 4-door | \$3,542.86 |
| | Sony Trinitron, 49 cm. | 640.00 |
| | Soviet Color TV, 67 cm. | 422.85 |
| | Domestic Vacuum Cleaner | 43.43 |
| | Yugoslav Winter Coat | 43.42 |
| | Sony Walkman | 31.43 |
| | Domestic Winter Boots | 27.14 |
| | Austrian Jeans | 16.87 |
| | Domestic cotton dress shirt | 5.43 |
| | Domestic polyester necktie | 1.14 |
| | Nivea Face Lotion | 1.03 |
| | Color Film | 1.06 |
| | Indian Pepsodent | .71 |
| | Petra Cigarettes | .26 |
| | Food Items: | |
| | Bologona, 1 kg. | .94 |
| | Cuban Grapefruit | .34 |
| | Sugar, 1 kg. | .21 |
| | Apples, 1 kg. | .19 |
| | Whole Milk, 1 lt. | .09 |
| | Coffee, 1 cup | .08 |
| | Cauliflower, 1 kg. | .07 |
| | Flour, 1 kg. | .03 |

(Exchange Rate \$1 = Kcs 35)

| | |
|--------------------|---|
| MEDIA: Newspapers- | <u>Rude Pravo</u> , major communist daily with circulation of 1 million; also <u>Lidove Noviny</u> , <u>Verjnost</u> , <u>Narodna Obrada</u> . ad price: varies. |
| Magazines- | <u>Mlady Svet</u> (young world) popular weekly magazine with paid circulation of 475,000. ad price: \$4,700, black & white, full-page. |
| Television- | <u>Program 1</u> and <u>Program 2</u> , two national TV stations. Plans are made for a third station. ad time price: Kcs 5,000, 60 seconds. |
| Radio- | Four national and ten regional stations. air time price: \$418, 60 seconds. |

Source: Derived from Advertising Age 1989.

REFERENCES

- Advertising Age, "Eastern Europe," February 19, 1990, pp. 34-43.
- Advertising Age, "Czech Media Eye More Ad Space," December 11, 1989a, p. 40.
- Advertising Age, "Economic Hope Flares for Czechs," December 4, 1989b, p. 4.
- Aviation Week & Space Technology, "Airframe Manufacturers Seek Sales Opportunities in Eastern Bloc," 128(7), February 15, 1988, pp. 112-113.
- Banker, "Biting the Bullet," 140 (768), February 1990, pp. 41-43.
- Boukaouris, Georgios N. "Joint Ventures in the USSR, Czechoslovakia and Poland," Case Western Reserve Journal of International Law, 21(1), Winter 1989, pp. 1-53.
- Brank, Laurie M. "Perestroika in Eastern Europe: Four New Joint Venture Laws in 1989", Law & Policy in International Business, 21(1), 1989, PP. 1-32.
- Brown, Stuart S. "Nonmarket Economies, Multiple Exchange Rates and the Countervailing Duty Law: The Case of Poland and Czech Steel," Journal of World Trade Law, 21(6), December 1987, pp. 89-111.
- Business America, "Business Outlook Abroad: Czechoslovakia," 111(4), February 26, 1990, pp. 20-22.
- Business Insurance, "Risk Managers Urged to Study East Bloc Plans," 24(12) March 19, 1990, pp. 29-30.
- Business International, 101 Checklists for Success in East European Markets, 1984.
- Business Week, "Blueprints for a Free Market in Eastern Europe," February 5, 1990, pp. 88-89.
- Business Week, "A New Economic Miracle?," November 27, 1989, pp. 58-65.
- Chemical Week, "Czechs Open Doors to Wary U.S. Companies," 145(3), July 19, 1989, pp. 32-33.
- Chemical Week, "Czech Chemical Industry Searches for a New Path," 143(3), July 20, 1988, pp. 38+.
- Computers in Industry, "Approaches to Industrial Robots Application in Discrete Manufacturing," 7(3), June 1986, pp. 233-235.
- Culpan, Refik. "Strategic Use of Countertrade in Multinational

- Business," Journal of Business Strategies, Spring 1989, pp. 22-32.
- D & B Reports, "What Does Eastern Bloc Upheaval Mean for U.S. Business?," 38(1), January/February 1990a, pp. 8+.
- D & B Reports, "The Old Bloc Magic," 38(2), March/April 1990b, pp. 22+.
- Economic Intelligence Unit, "Country Profile: Czechoslovakia," 1989-1990.
- Economic Intelligence Unit, "Country Report: Czechoslovakia," 2, 1990.
- Economic Intelligence Unit, "Quarterly Report: France," 1978.
- Economic Intelligence Unit, "Quarterly Report: Norway," 1976.
- Economist, "Communist Cars: Upwardly Mobile," April 30, 1988, pp. 68-69.
- Economist, "Letters: Porter's Complaint," June 30, 1990a, p. 6.
- Economist, "Skoda: Playing Hard to Get," June 30, 1990b, p. 69.
- Euromoney, "Risks of East-West Joint Ventures," September 1987, pp. 476-479.
- Financial World, "The Czech Balancing Act," 159(5), March 6, 1990a, pp. 36-37.
- Financial World, "Top of the Bloc: Ninety for the Nineties," 159(5), March 6, 1990b, pp. 56-61.
- Financial World, "East Bloc Entrepreneurs," 159(5), March 6, 1990c, pp. 62-53.
- Forbes, "East Bloc Arbitrage," 145(7), April, 2, 1990a, pp. 190+.
- Forbes, "Memories of Development," 145(8), April 16, 1990b, pp. 93-99.
- Forbes, "These Countries are Up For Sale," December 25, 1989, p. 130.
- Fortune, "What Eastern Europe Offers," 121(6), March 12, 1990, pp. 52-55.
- Francis D. The Countertrade Handbook. Cambridge, Woodhead-Faulkner, 1987.
- Frank, Eric. "Economic Change and Management Development in Eastern Europe," Journal of European Industrial Training, 12(8), 1988.
- Huszagh, Sandra M. & Barksdale, Hiram C. "International Barter and Countertrade: An Exploratory Study," Journal of the Academy of Marketing Science, Spring 1986, pp. 21-28.

Industry Week, "Poland: The Chance of a Lifetime for the West; Czechoslovakia: The Absurd Powerhouse," 239(3), February 5, 1990, pp. 43-47.

Interavia, "Italy: Third Pole in Need of Balancing," 41, May 1986, pp. 527-534.

Interavia, "Czechoslovak Aircraft Industry: Alive and Well...", 40, June 1985, pp. 660-664.

International Management, "Eurotrends: More to Come," 45(2), March 1990, p. 6-7.

International Trade Forum, "Czechoslovak Market Offers Sales Opportunities for Developing Countries," 23(4), October/December 1987, pp. 18+.

Porter, Michael E. "The Competitive Advantage of Nations," Harvard Business Review, March-April 1990, pp. 73-93.

Porter, Michael E. The Competitive Advantage of Nations, New York, The Free Press, 1990.

Prahalad, C. K. and Hamel, G. "The Core Competence of the Corporation," Harvard Business Review, May-June 1990, pp. 79-91.

Production, "Skoda Line is a Good Mix," 100(7), July 1988, pp. 68-70.

Rabino, S. and Shah, K. "Countertrade and Penetration of IDC's Markets," Columbia Journal of International Business. 22(4), Winter 1987, pp. 31-37.

Statisticka Rocenka CSSR, Prague, Czecho-Slovakia, 1989.

Tesar, Vladimir. "The Role and Problems of An Enterprise Director in the Czechoslovak Automobile Industry," International Labor Review, 125(4), July/August 1986, pp. 435-445.

U.S. Department of Commerce, "FET Report: Czechoslovakia," March 1989.

Ward's Auto World, "Skoda Sets its Sights on Increasing Exports to the West," November 1989, pp. 67-68.

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